

Title (en)

IMPULSE SOUND TRANSDUCER WITH AN ELEMENTARY BLOCK MADE OF PIEZOELECTRIC MATERIAL

Title (de)

IMPULS-ULTRASCHALLWANDLER MIT EINEM ELEMENTARBLOCK AUS PIEZOELEKTISCHEM MATERIAL

Title (fr)

TRANSDUCTEUR ACOUSTIQUE A IMPULSIONS COMPRENANT UN BLOC ELEMENTAIRE EN MATERIAU PIEZOCERAMIQUE

Publication

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Application

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Abstract (en)

[origin: US6720715B1] The invention relates to an impulse sound traducer for the ultrasonic range. Transducers in prior art require complicated and expensive technology in order to really generate good impulses. The invention aims at providing a sound transducer for the ultrasonic range, which transmits strong and short impulses, has high sensivity and ensures repeatability of parameters. This is achieved by a sound transducer for the ultrasonic range that is used both as a transmitter and as a receiver and is comprised of an elementary block made of piezoelectric material, wherein the height of the elementary blocks consisting of piezoelectric material is bigger than its width and the block on the output end of the impulse has a formed edge so that the elementary block has a T-shape in the longitudinal section, wherein one electrode is provided on the outlet surface while the other electrode extends above the edge on the block.

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